

# Identification of an RNase that preferentially cleaves A/G nucleotides

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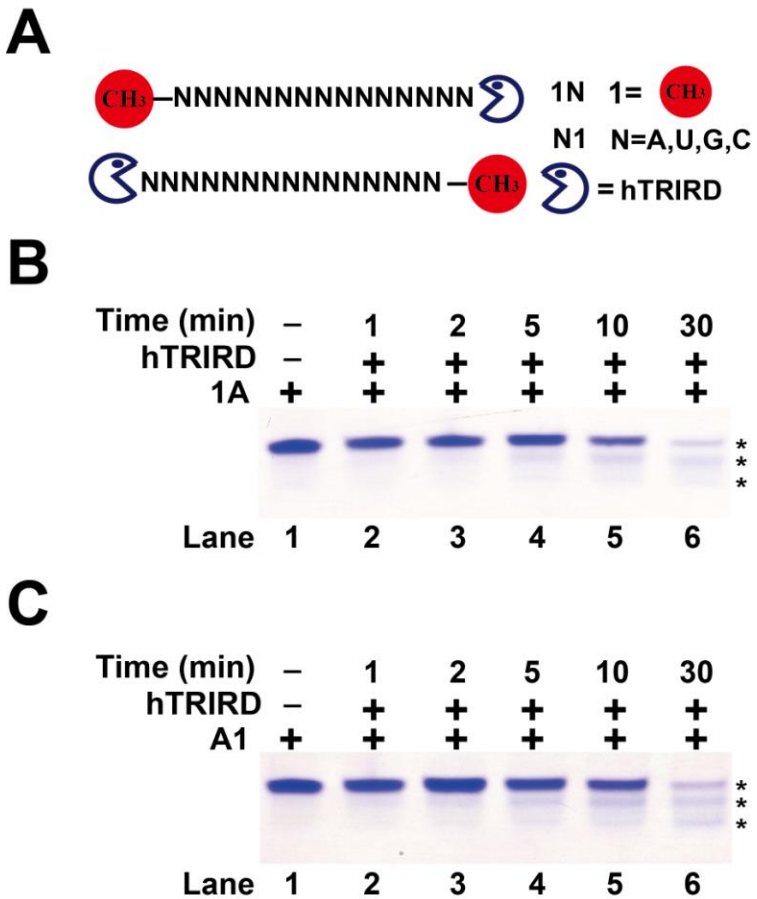
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**Supplementary table S1.** 3 independent mass spectrum analysis of hTRIR.

|   | Accession | Description   | $\Sigma$ Coverage | $\Sigma$ #<br>Proteins | $\Sigma$ # Unique<br>Peptides | # AAs                 | MW<br>[kDa] |
|---|-----------|---|-------------------|------------------------|-------------------------------|-----------------------|-------------|
| 1 | Q9BQ61    | Uncharacterized protein C19orf43 OS=Homo sapiens<br>GN=C19orf43 PE=1 SV=1 - [CS043_HUMAN] | 7.95              | 1                      | 1                             | 176                   | 18.4        |
|   |           | Sequence  | # PSMs            | #<br>Proteins          | # Protein<br>Groups           | # Missed<br>Cleavages |             |
|   |           | EAPGPAGGGGGSR   | 2                 | 1                      | 1                             | 0                     |             |
|   |           |   |                   |                        |                               |                       |             |
| 2 | Q9BQ61    | Uncharacterized protein C19orf43 OS=Homo sapiens<br>GN=C19orf43 PE=1 SV=1 - [CS043_HUMAN] | 22.73             | 1                      | 3                             | 176                   | 18.4        |
|   |           | Sequence  | # PSMs            | #<br>Proteins          | # Protein<br>Groups           | # Missed<br>Cleavages |             |
|   |           | QRQEPPPGPQRPDQSAAGPGDPKR  | 3                 | 1                      | 1                             | 2                     |             |
|   |           | QRQEPPPGPQRPDQSAAGPGDPKR  | 3                 | 1                      | 1                             | 2                     |             |
|   |           | KGGPGSTLSFVGK   | 2                 | 1                      | 1                             | 1                     |             |
|   |           | GGPGSTLSFVGK  | 2                 | 1                      | 1                             | 0                     |             |
|   |           |   |                   |                        |                               |                       |             |
| 3 | Q9BQ61    | Uncharacterized protein C19orf43 OS=Homo sapiens<br>GN=C19orf43 PE=1 SV=1 - [CS043_HUMAN] | 54.55             | 1                      | 9                             | 176                   | 18.4        |
|   |           |   |                   |                        |                               |                       |             |

### Supplementary figure S1.



**Figure S1. hTRIR is an exoribonuclease.** (A) Chemically synthesized RNA oligos with methylated group at either 5' end or 3' end were

shown. **(B)** Synthesized 1A and **(C)** A1 were digested by hTRIRD for different time as indicated. Low molecular ladder of digested 1A and A1 were detected after 5 min incubation and marked with \*.